

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014407**Date Inspected:** 18-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Yu Dong Ping  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

**TOWER TRIAL ASSEMBLY**

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005764

**Ultrasonic Testing (UT)**

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

**SOUTH TOWER LIFT – 1 DOUBLER PLATE & CROSS BRACING****P475 – S – 1; 2; 5**

This QA Inspector observed the following work in progress:

**Shielded Metal Arc Welding (SMAW):**

Weld joint # 03 located on East Tower Lift-1 cross bracing to doubler strut plate P475 – E. Welder is identified as 040724. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4213 – Tc – U4c – 2.

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Weld joint # 04 located on East Tower Lift-1 Doubler plate to Doubler strut plate P475 – E. Welder is identified as 040724. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U2a – 1.

Weld joint # 02 located on East Tower Lift-1 cross bracing to doubler strut plate P475 – E. Welder is identified as 202100. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4213 – Tc – U4c – 2.

Weld joint # 01 located on East Tower Lift-1 Doubler plate to Doubler strut plate P475 – E. Welder is identified as 202100. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U2a – 1.  
(See attached photo)

### BAY#10

This QA Inspector observed the following work in progress:

Flux cored Arc Welding (FCAW):

Weld joint # 24 located on Bearing Stiffener of Shear plate ED1 – A27B/E. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2331 – Tc – P4 – F.

Weld joint # 34 located on Bearing Stiffener of Shear plate ED1 – A27B/E. Welder is identified as 040465. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2331 – Tc – P4 – F.

Weld joint # 46 located on Bearing Stiffener of Shear plate ED1 – A27B/E. Welder is identified as 255455. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2331 – Tc – P4 – F.

### BAY#11

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW):

Weld joint # 9B located on Tower Strut ED1 – STSA4 – 10 – 119M – 1. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – TC – U5b.

Weld joint # 7B located on Tower Strut ND1 – STSA4 – 10 – 119M – 1. Welder is identified as 041271. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1. (See attached photo)

Weld joint # 35A located on Tower Strut ED1 – STSA4 – 10 – 119M – 1. Welder is identified as 046769. ZPMC

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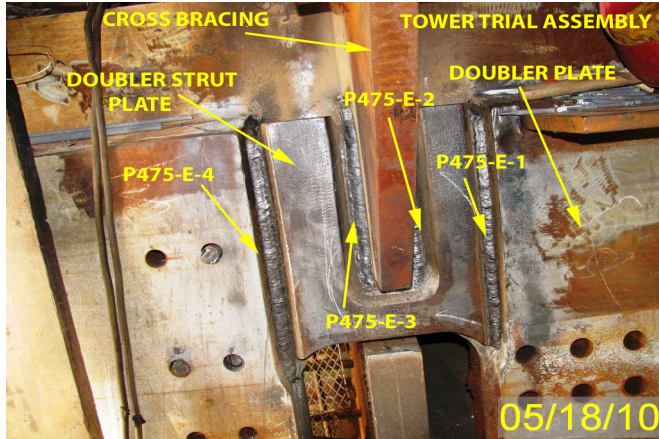
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Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – TC – U5b – 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Sandeep

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer